In the claims:

Please cancel claims 10, 22, and 23.

Claims 4-7, 13-16, 18-20, and 24-31 have been withdrawn by the Examiner pursuant to a restriction requirement.

Please amend claims 1, 12, and 21 as follows:

1. (Currently Amended) A coaxial probe for high frequency testing of planar electric transmission line structures, said probe comprising:

a probe mount comprising a coaxial connector;

a center electrode mounted on said probe mount and electrically connected to a center conductor of said coaxial connector, wherein said center conductor may be placed in contact with a first point on a planar electric transmission line structure to be tested;

an non-circular outer electrode mounted on said probe mount and electrically connected to ground, said outer electrode comprising a protrusion to be placed in contact with a second point on the planar electric transmission line structure to be tested wherein a pitch of said protrusion can be varied by affixing said protrusion on said outer electrode to match a pitch between the first point and the second point without affecting a characteristic impedance of a coaxial cable assembly, the coaxial connector and said probe mount; and

a dielectric of non-uniform thickness between said center and said outer electrodes, wherein said coaxial probe is configured to match said characteristic impedance.

2. (Original) The probe of claim 1 wherein said probe mount comprises a conductive plate.

3. (Original) The probe of claim 2 wherein said dielectric comprises air.

4. (Withdrawn)

5. (Withdrawn)

6. (Withdrawn)

7. (Withdrawn)

8. (Original) The probe of claim 1 wherein said outer electrode comprises a conductive tube having said non-circular cross-section.

9. (Original) The probe of claim 8 wherein said outer electrode has a cross-section selected from the group consisting of oval, square, rectangular, hexagonal, L-shaped, and U-shaped.

10. (Canceled)

11. (Original) The probe of claim 1 wherein a pitch between said center electrode and said protrusion is fixed.

12. (Currently Amended) The probe of claim 1 wherein said protrusion comprises a ~~60-degree~~ tapered point.

13. (Withdrawn)

14. (Withdrawn)

15. (Withdrawn)

16. (Original) The probe of claim 1 wherein said probe is handheld during testing of the planar electric transmission line structure.

17. (Original) The probe of claim 1 wherein said characteristic impedance ~~characteristics~~ of said probe substantially matches ~~those of~~ a coaxial cable ~~attached to said connector~~ characteristic impedance.

18. (Withdrawn)

19. (Withdrawn)

20. (Withdrawn)

21. (Currently Amended) A coaxial probe for high frequency testing of planar electric transmission line structures, said probe comprising:

a probe mount;

a center electrode mounted on said probe mount, wherein ~~said~~ a center conductor may be placed in contact with a first point on a planar electric transmission line structure to be tested; and

an outer electrode comprising a protrusion, wherein a pitch of said protrusion can be varied by affixing said protrusion on said outer electrode to match a pitch between the first point and a second point without affecting a characteristic impedance of a coaxial cable assembly, a coaxial connector and said probe mount, attached on a ~~of~~ non-circular cross-section casing ~~mounted on said probe mount~~, wherein said coaxial probe is configured to match said characteristic impedance.

22. (Canceled)

23. (Canceled)

24. (Withdrawn)

25. (Withdrawn)

26. (Withdrawn)

27. (Withdrawn)

28. (Withdrawn)

29. (Withdrawn)

30. (Withdrawn)

31. (Withdrawn)

Please add the following claims:

32. (Currently Added) The probe of claim 1 wherein said outer electrode comprises an axially spring loaded conductor.

33. (Currently Added) The probe of claim 1 wherein said coaxial connector comprises a resilient coaxial connector.

34. (Currently Added) The probe of claim 21 wherein said outer electrode comprises an axially spring loaded conductor.

35. (Currently Added) The probe of claim 21 wherein said coaxial connector comprises a resilient coaxial connector.